



Department of Defense DIRECTIVE

NUMBER 3150.2

December 23, 1996

Certified Current as of March 8, 2004

ATSD(NCB)

SUBJECT: DoD Nuclear Weapon System Safety Program

- References: (a) DoD Directive 3150.2, "Safety Studies and Reviews of Nuclear Weapon Systems," February 8, 1984 (hereby canceled)
- (b) [DoD Directive 3150.1](#), "Joint Nuclear Weapons Development Studies and Engineering Projects," December 27, 1983
 - (c) [DoD Directive 5000.1](#), "Defense Acquisition," March 15, 1996
 - (d) [DoD 5025.1-M](#), "DoD Directives System Procedures," August 1994
 - (e) through (g), see enclosure 1

1. REISSUANCE AND PURPOSE

This Directive:

1.1. Reissues reference (a) to establish the DoD Nuclear Weapon System Safety Program.

1.2. Issues DoD nuclear weapon system safety policy, reissues the four DoD nuclear weapon system safety standards, assigns responsibilities for the management of the DoD Nuclear Weapon System Safety Program, and requires safety to be considered during joint DoD-Department of Energy (DoE) nuclear weapon life-cycle activities under reference (b) and nuclear weapon system acquisition activities under reference (c).

1.3. Authorizes the publication of DoD 3150.2-M, "DoD Nuclear Weapon System Safety Program Manual," consistent with reference (d), providing principal guidance on execution of the DoD Nuclear Weapon System Safety Program.

1.4. Assigns responsibilities for the Nuclear Weapons Technical Inspection System and the DoD Nuclear Weapon System Safety Training Program.

2. APPLICABILITY

This Directive applies to the Office of the Secretary of Defense (OSD), the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, and the Defense Agencies (hereafter referred to collectively as "the DoD Components").

3. DEFINITIONS

Terms used in this Directive are defined in enclosure 2.

4. POLICY

4.1. It is DoD policy that four DoD Nuclear Weapon System Safety Standards shall serve as the foundation for all nuclear weapons safety matters, as follows:

4.1.1. There shall be positive measures to prevent nuclear weapons involved in accidents or incidents, or jettisoned weapons, from producing a nuclear yield.

4.1.2. There shall be positive measures to prevent DELIBERATE pre-arming, arming, launching, or releasing of nuclear weapons, except upon execution of emergency war orders or when directed by competent authority.

4.1.3. There shall be positive measures to prevent INADVERTENT pre-arming, arming, launching, or releasing of nuclear weapons in all normal and credible abnormal environments.

4.1.4. There shall be positive measures to ensure adequate security of nuclear weapons, under DoD Directive 5210.41 (reference (e)).

4.2. It is further DoD policy that:

4.2.1. Nuclear weapon systems shall require special consideration because of their political and military importance, their destructive power, and the potential consequences of an accident or unauthorized act.

4.2.2. Nuclear weapon systems shall be evaluated throughout their DoD life cycles for compliance with the four DoD Nuclear Weapon System Safety Standards, through a formal studies and review process.

4.2.3. Nuclear weapon systems shall be designed or improved to the maximum extent practical with current and approved advanced safety technologies, consistent with cost and operational feasibility.

4.2.4. Nuclear weapons systems shall be designed, maintained, transported, stored, and employed to incorporate maximum safety, consistent with operational requirements.

4.2.5. Procedures, personnel, equipment, facilities, and organizations shall be certified before conducting operations with nuclear weapons or nuclear weapon systems.

4.2.6. Safety rules, technical and operational procedures, and other positive measures shall be developed and approved for each nuclear weapon system, through a formal approval process, and shall apply to each nuclear weapon or weapon system in the custody of the Department of Defense.

4.2.7. Personnel involved in nuclear operations shall receive appropriate training and will be continually evaluated as required by DoD Directive 5210.42 (reference (f)).

4.2.8. Nuclear weapon system safety, security, survivability, and use control are interrelated. Decisions concerning one shall not be made without consideration of the effect of those decisions on the others.

4.2.9. Nuclear weapons and nuclear weapon systems shall not be intentionally exposed to abnormal environments, and there shall be no deviation from established procedures, except in an emergency.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology shall:

5.1.1. Ensure that the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)) shall do the following:

5.1.1.1. Be responsible to the Secretary of Defense for all matters associated with nuclear weapon system safety under DoD Directive 5134.8 (reference (g)), establish safety policy, and monitor compliance with the DoD Nuclear Weapon System Safety Program.

5.1.1.2. Serve as the OSD principal point of contact with the DoD Components, the DoE, the Department of State, the Joint DoD-DoE Nuclear Weapons Council, and other Government Agencies in executing safety responsibilities. Communication with the Combatant Commands shall be through the Chairman of the Joint Chiefs of Staff.

5.1.2. Ensure that the ATSD(NCB) shall ensure that the Director, Defense Special Weapons Agency, shall do the following:

5.1.2.1. Provide technical advice and assistance to the OSD, the Chairman of the Joint Chiefs of Staff, and the Secretaries of the Military Departments in the execution of the DoD Nuclear Weapon System Safety Program.

5.1.2.2. Support the Military Departments and the Combatant Commands on nuclear weapon system safety matters.

5.1.2.3. Develop and maintain nuclear weapon safety databases as requested by a Military Department.

5.1.2.4. In coordination with the Military Departments, chair a joint Service working group to define requirements for the maintenance of nuclear weapon safety databases.

5.1.2.5. Develop, implement, and operate a DoD nuclear weapon system safety training program.

5.1.2.6. Conduct defense nuclear surety inspections for the Chairman of the Joint Chiefs of Staff.

5.2. The Secretaries of the Military Departments shall do the following:

5.2.1. Ensure the safety and security of all nuclear weapons and nuclear weapon systems for which the Military Department has a DoD life-cycle management responsibility.

5.2.2. Conduct nuclear weapon system safety studies, reviews, and safety assessments on U.S. nuclear weapons and allied systems using U.S. nuclear weapons to support the DoD Nuclear Weapon System Safety Program.

5.2.3. Ensure that nuclear weapons technical inspections are conducted.

5.2.4. Establish safety design and evaluation criteria for nuclear weapon systems.

5.2.5. Conduct safety certifications of nuclear weapon systems, including DoD support equipment and software that affects nuclear safety.

5.2.6. In coordination with the Defense Special Weapons Agency, participate in a joint Service working group to define requirements for the maintenance of nuclear weapon safety databases.

5.3. The Chairman of the Joint Chiefs of Staff shall do the following:

5.3.1. Advise the Secretary of Defense on nuclear weapon system safety matters.

5.3.2. Establish nuclear weapons technical inspection policy and monitor implementation of the inspection system.

5.4. The Commanders of the Combatant Commands shall do the following:

5.4.1. Ensure the safety and security of all nuclear weapons and nuclear weapon systems for which the Combatant Command has responsibility.

5.4.2. Provide assistance to the responsible Military Departments for the conduct of required safety studies, reviews, and inspections of allied forces that will use U.S. nuclear weapons.

6. EFFECTIVE DATE

This Directive is effective immediately.

A handwritten signature in black ink, appearing to read "John P. White", is written over a horizontal line.

John P. White
Deputy Secretary of Defense

Enclosures - 2

- E1. References, continued
- E2. Definitions

E1. ENCLOSURE 1

REFERENCES, continued

- (e) [DoD Directive 5210.41](#), "Security Policy for Protecting Nuclear Weapons,"
September 23, 1988
- (f) [DoD Directive 5210.42](#), "Nuclear Weapon Personnel Reliability Program (PRP),"
May 25, 1993
- (g) [DoD Directive 5134.8](#), "Assistant to the Secretary of Defense for Nuclear and
Chemical and Biological Defense Programs (ATSD(NCB))," June 8, 1994

E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. DoD Nuclear Weapon System Safety Program. A program integrating safety policy, organizational responsibilities, and formalized procedures throughout a nuclear weapon system's life cycle to protect nuclear weapon systems. The program involves identifying, evaluating, controlling, and reducing risks related to nuclear weapons. Positive measures are used to enhance the safety of nuclear weapon systems.

E2.1.2. Emergency. An unexpected occurrence or set of circumstances in which personnel or equipment unavailability, due to accident, natural event, or combat, may demand immediate action that may require extraordinary measures to protect, handle, service, transport, jettison, or employ a nuclear weapon.

E2.1.3. Life-Cycle Process. The breadth of activities applicable to a nuclear weapon throughout its lifetime that includes development, testing, production, transportation, acceptance, storage, maintenance, upgrades, retirement, and dismantlement, as well as approved operations.

E2.1.4. Nuclear Weapon. A device in which the explosion results from the energy released by reactions involving fission or fusion (of atomic nuclei).

E2.1.5. Nuclear Weapon System. A nuclear weapon and a means for delivering it to the target, with associated support equipment, facilities, procedures, personnel, and any vehicles peculiar to the system used for weapon transport.

E2.1.6. Nuclear Weapon System Safety. The application of engineering and management principles, criteria, and techniques to protect nuclear weapons against the risks and threats inherent in their environments within the constraints of operational effectiveness, time, and cost throughout all phases of their life cycle.

E2.1.7. Positive Measures. Design features, safety rules, procedures, accident prevention or mitigation measures, or other controls including physical security and coded systems, used collectively or individually, to enhance safety and reduce the likelihood, severity, or consequences of an accident, unauthorized act, or deliberate threat.